



# Why the Retail Environment Matters (and how to learn more about it)

**Nina Baltierra, MPH**

*Director of Programs*

[nina@countertools.org](mailto:nina@countertools.org)

# About Counter Tools

- Client-services & education 501(c)(3)
- Launched June 28, 2012
- Team of 17
- Startup of UNC Chapel Hill
- Based in Carrboro, NC
- Funded by contracts and grants
- CounterTobacco.org





Our mission is to promote public health equity by providing technology tools, training, and technical assistance to our local, state and national partners who are enacting, enforcing and evaluating evidence-based policy, systems and environmental interventions to advance place based public health.



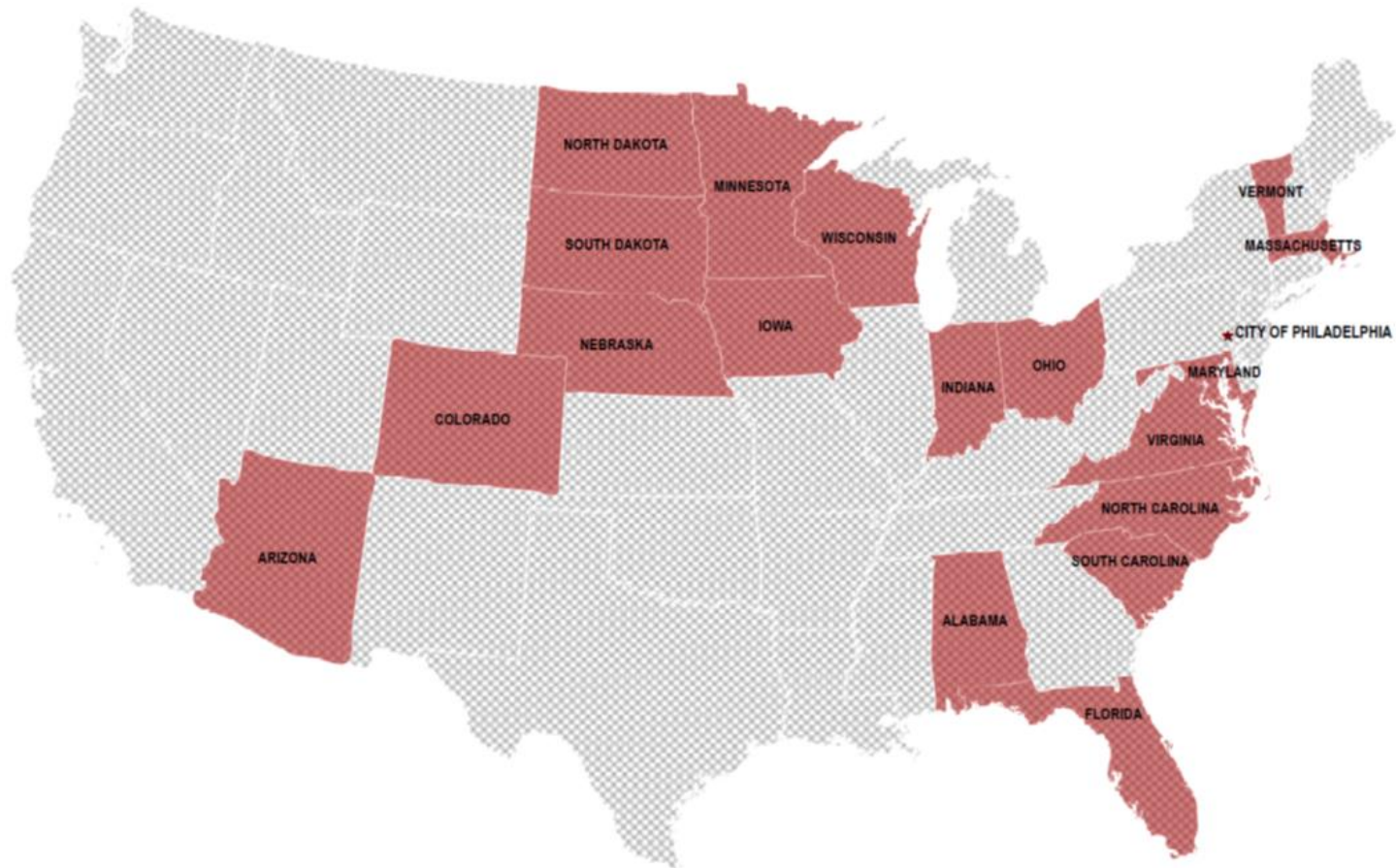


Our mission is to promote public health equity by providing technology tools, training, and technical assistance to our local, state and national partners who are enacting, enforcing and evaluating evidence-based policy, systems and environmental interventions to advance place based public health.



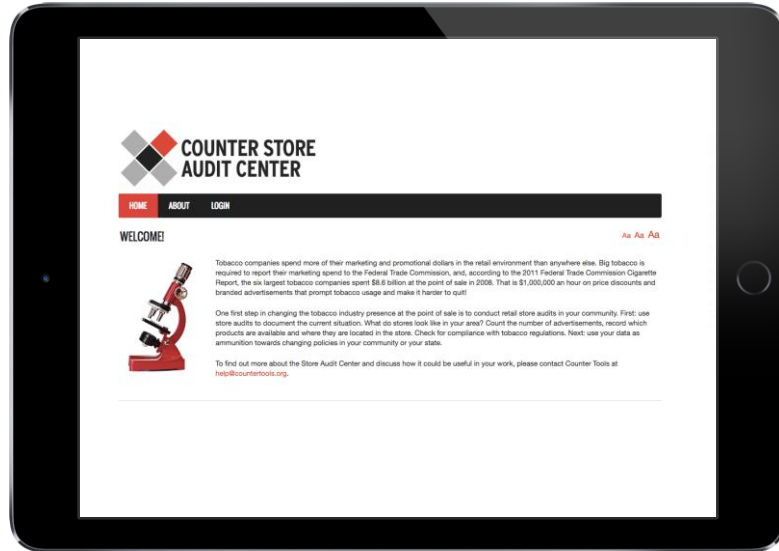


# Where We Work



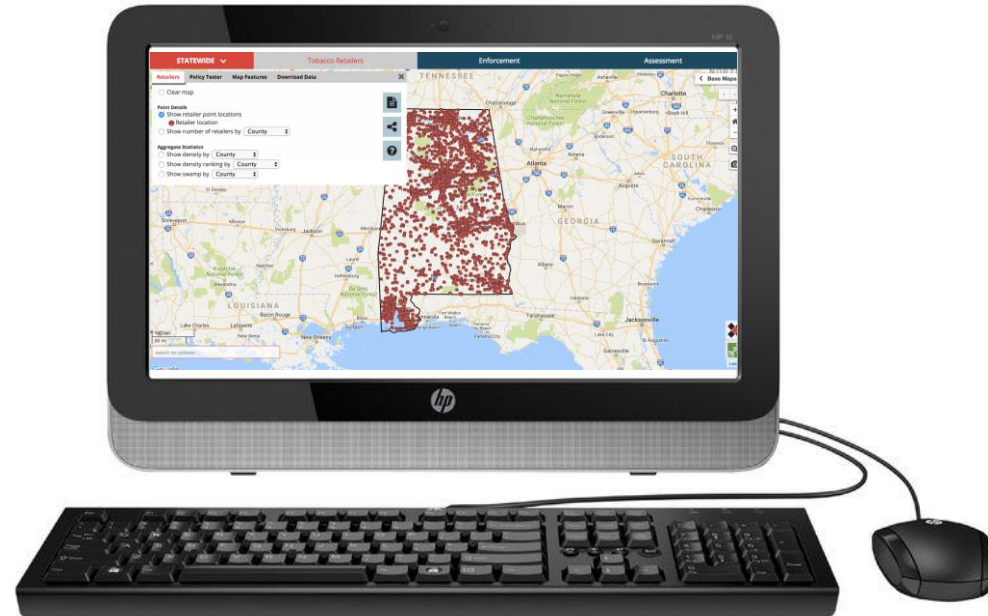
# Local Data for Social Change

## Store Audit Center<sup>©</sup>



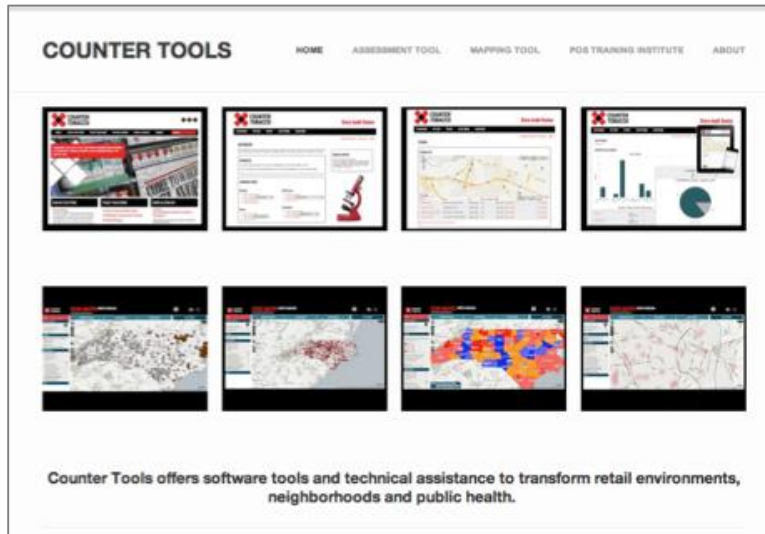
**Captures Retailer Content**  
(e.g. do retailers sell flavored products?  
What is the cost of Blu e-cigs in my area)

## Store Mapper<sup>©</sup>



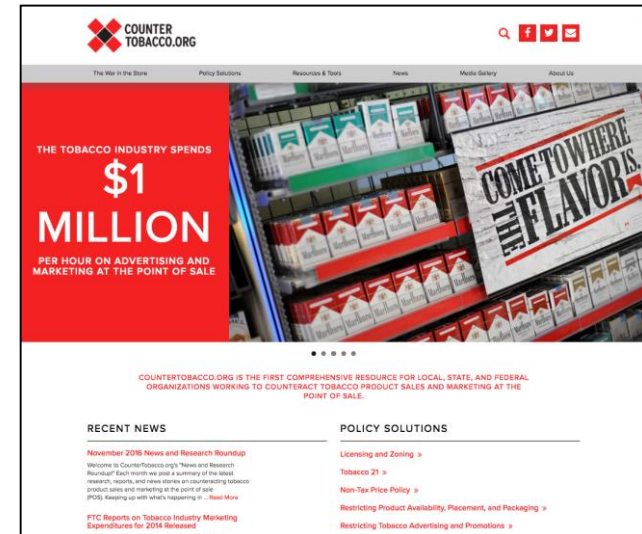
**Captures the Retailer Landscape**  
(e.g. What is the retailer density in my county?)

# Complement to Free CounterTobacco.org Resources



## [www.CounterTools.org](http://www.CounterTools.org)

- Established June, 2012
- Provides enhanced software tools and technical assistance for surveillance, evaluation, policy/systems/environmental change
- Nonprofit organization
- Funded by contracts/training fees



## [www.CounterTobacco.org](http://www.CounterTobacco.org)

- Established August, 2011
- Free information and resource warehouse for POS tobacco control
- A project of Counter Tools, funded by CDC OSH and ChangeLab Solutions

# In this session

1. Why does the retail environment matter for health?
2. What are retailer assessments and why should we do them?
3. The Standardized Tobacco Assessment for Retail Settings (STARS)





Why does the retail environment matter for health?

# Let's define the “retail environment” or “point of sale”



© 2013 California Department of Public Health

# 4 Reasons Why POS Matters



1. Industry  
marketing  
spending



2. Youth tobacco  
use initiation



3. Quit attempts  
more difficult



4. Density and  
proximity



# 1. Industry Marketing Spending

4 Reasons Point of Sale Matters



# The 4 P's of Marketing

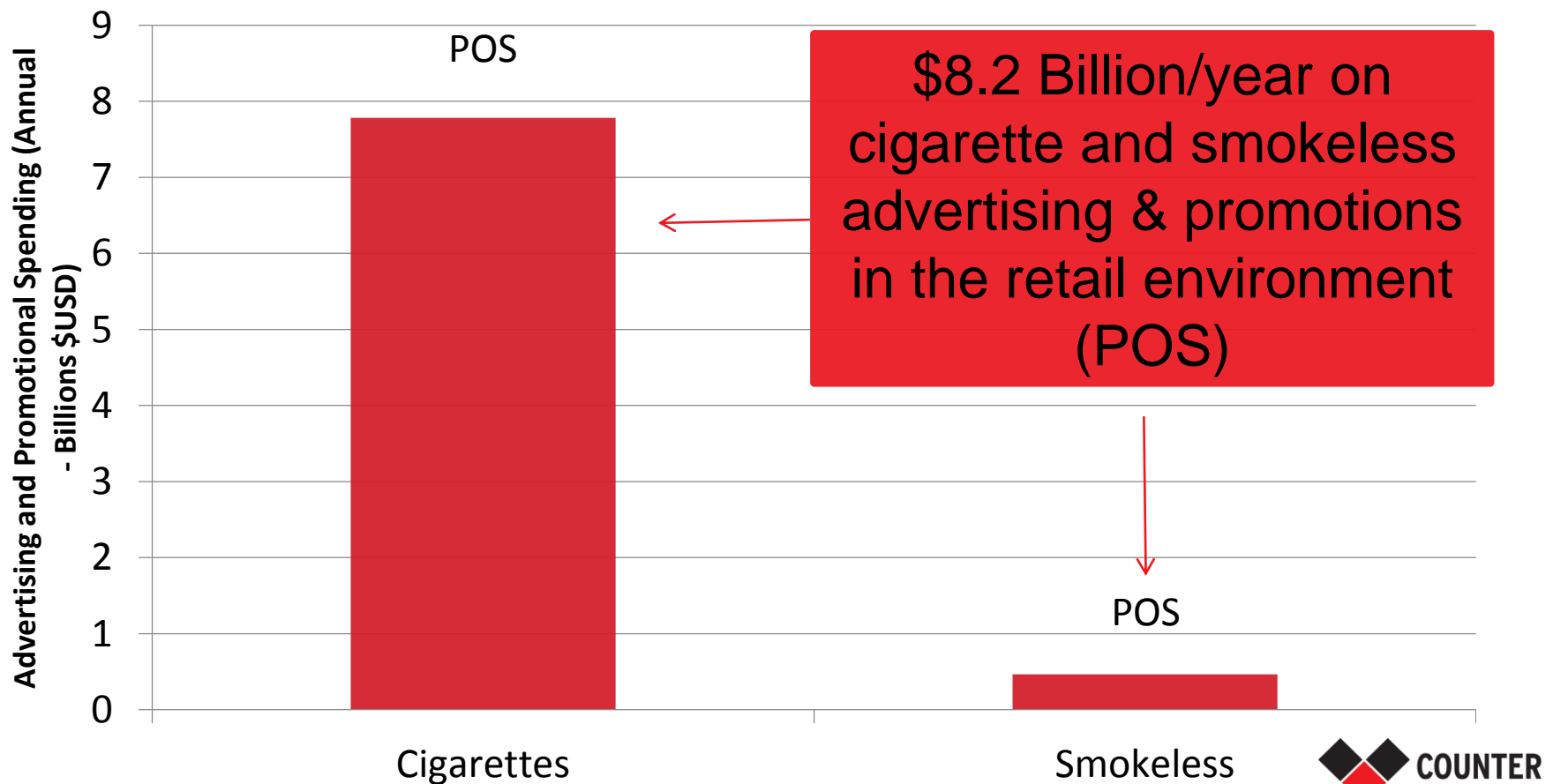


1. Product
2. Placement
3. Price
4. Promotion



# Retail is the tobacco industry's lead marketing channel

Tobacco Industry Spending in the Retail Environment



# Spending breakdown

Price discounts and  
promotional  
allowances (paid to  
retailers)

**\$6.1 Billion/YR**



POS Advertisements  
(Signs, functional  
items, displays,  
shelving units)

**\$271.1 Million/YR**



Coupons

**\$562 Million/YR**



# The retail store is where tobacco enters your community!





## 2. Youth Tobacco Use Initiation

4 Reasons Point of Sale Matters

# Kids are frequent c-store shoppers

- 2011-12 nationally representative sample of 13-16 year olds: Almost half (48%) visit at least once a week<sup>1</sup>
- C-stores have more tobacco marketing materials than other store types<sup>2-5</sup>



1. Sanders-Jackson, et al., 2015; 2. Feighery, et al., 2008; 3. Henriksen, et al., 2008; 4. Henriksen, et al., 2010; 5. SGR Report, 2012.



# Exterior Advertising



# Exposure to in-store marketing linked to tobacco use initiation



Children and adolescents more frequently exposed to POS tobacco promotion have ~1.6 times higher odds of having tried smoking and ~1.3 times higher odds of being susceptible to future smoking compared to those less frequently exposed.

# A Longitudinal Study of Exposure to Retail Cigarette Advertising and Smoking Initiation



- First study to longitudinally assess relationship between exposure to tobacco advertising and smoking behavior
- 29% smoking initiation among those who visited retail stores at least twice a week vs. 9% smoking initiation among those who visited retail stores less than twice per month
- Exposure to tobacco advertising leads to initiation

Henriksen, L., Schleicher, N. C., Feighery, E. C., & Fortmann, S. P. (2010). A longitudinal study of exposure to retail cigarette advertising and smoking initiation. *Pediatrics*, 126(2), 232-238



# Youth Exposure to Advertising and E-Cigarette Use

Greater exposure to e-cigarette ads is associated with higher odds of youth e-cigarette use. Most e-cigarettes contain **NICOTINE**, which can cause **ADDICTION**, may harm brain development, and could lead to continued tobacco product use among youth.

*Efforts to reduce youth exposure to tobacco advertising are crucial to prevent all forms of tobacco use among youth.*

SOURCE: Pediatrics, April 2016



## Sources of E-Cigarette Advertising



**14.4 million**

youth are exposed  
at retail stores



**10.5 million**

youth are exposed  
through the internet



**9.6 million**

youth are exposed  
through TV/movies



**8 million**

youth are exposed  
through magazines  
and newspapers

SOURCE: CDC Vital Signs, January 2016

[bit.ly/YouthTobaccoUse](http://bit.ly/YouthTobaccoUse)





### 3. Quit Attempts More Difficult

4 Reasons Point of Sale Matters



Imagine trying to quit while driving in this neighborhood...



# Exposure to retail marketing associated with impulse purchase



Slater, et al., 2007



## 4. Proximity and Density Double Whammy!

4 Reasons Point of Sale Matters

# Proximity and Density:

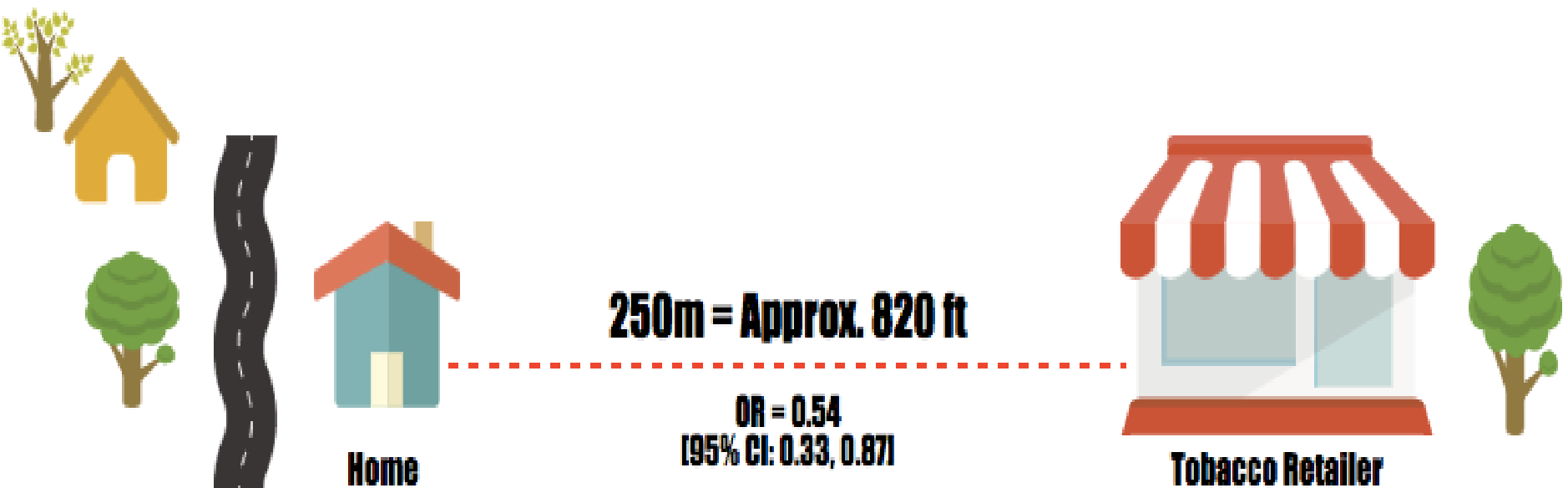
## Proximity

- A measure of the distance to nearest tobacco retailers in an area;
- Measured in feet, miles or km; radial or network buffers

## Density

- A measure of the concentration or clustering of tobacco retailers in an area;
- Measured as number per 1,000 population, e.g., 1.2 retailers per 1,000 people

# Close proximity associated with less long term quit success





# Higher density associated with initiation among US young adults

- 2013 nationally representative sample of young adults aged 18-34, merged with 2012 US tobacco retailer list and home addresses
- Higher retailer density associated with higher likelihood of *initiating* cigarette use among 25-34 year olds (OR=3.75, 95% CI 1.18, 11.90)
- Higher retailer density **associated with higher likelihood of *initiating* non-cigarette combustible use among 18-24 year olds** (OR=3.16, 95% CI 1.03, 9.74)



# Higher density + proximity associated with higher school smoking prevalence



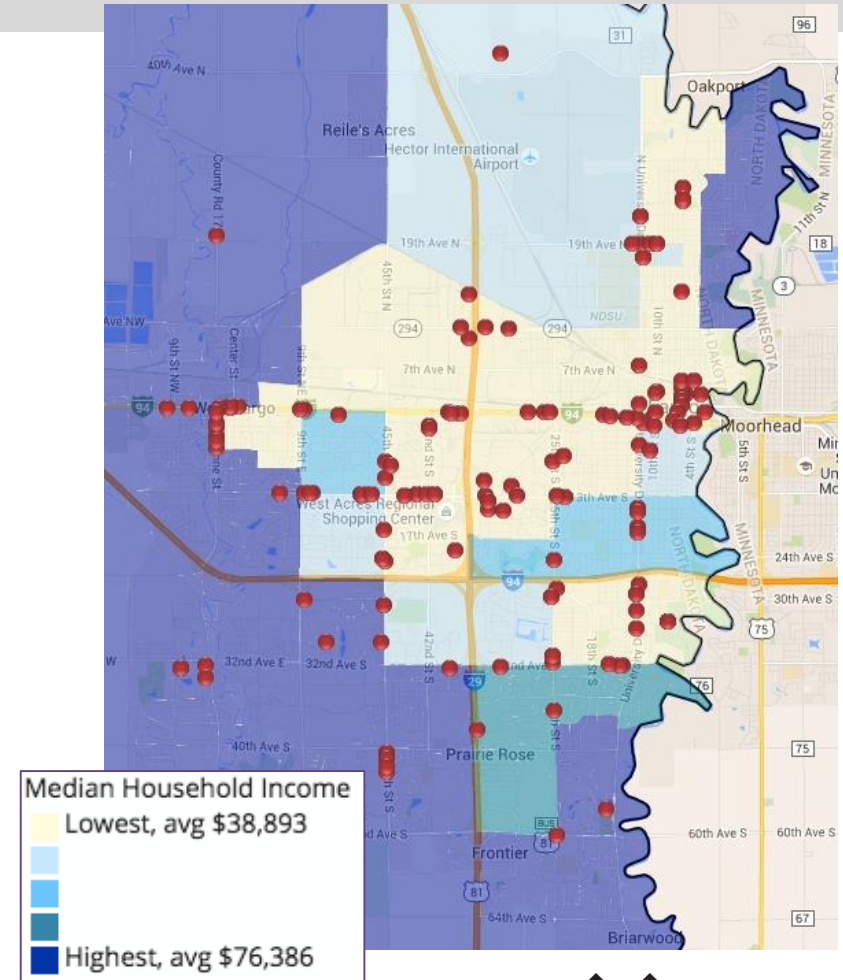
Photo credit: [www.ccpes.org](http://www.ccpes.org)

- California, 2008: Schools with higher numbers of tobacco retailers within walking distance have higher school smoking prevalence<sup>2</sup>

# Retailers cluster in disadvantaged areas

Higher retailer density in

- communities with lower median household income<sup>1-3</sup>
- communities with higher percentage of African American<sup>1,2</sup> or Latino families<sup>1</sup>



1. Schneider JE et al. Prev Sci, 2005. 2. Hyland, A, et al., AJPH, 2003 3. Loomis, BR, et al, Public Health, 2013

# Review:

## 4 Reasons POS Matters



1. Industry  
marketing  
spending



2. Youth tobacco  
use initiation



3. Quit attempts  
more difficult



4. Density and  
proximity





What are retailer assessments and why should we do them?

# Retailer Assessments



- ✓ Store type
- ✓ Exterior ads
- ✓ Availability of:
  - ✓ All tobacco products
  - ✓ Alcohol
  - ✓ Flavored products
  - ✓ Singles
- ✓ Pharmacy counter?
- ✓ Price of cheapest cigarette pack
- ✓ WIC/SNAP
- ✓ Advertised <\$1
- ✓ Price promotions

# Collect High Quality Local Data

**Elementary School**



**BP Gas Station**



**Exxon Gas Station**



**Citgo Gas Station**

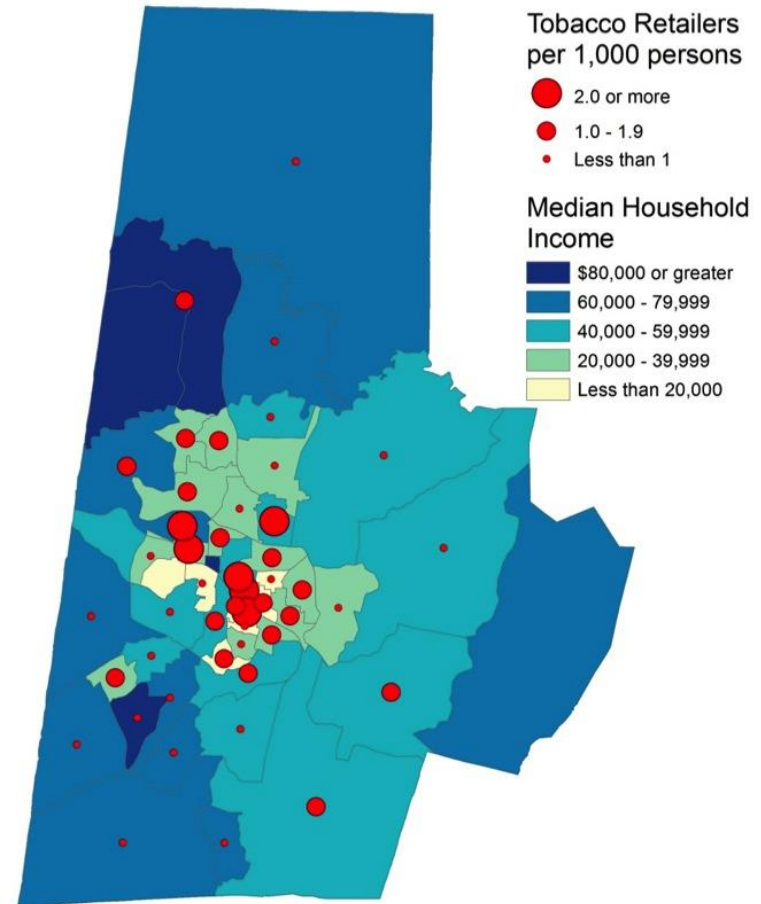




# Engage Youth & Community Members



# Identify Disparities





# Document Industry Targeting







placement





PERMIT PARKING  
ONLY  
TOW AWAY ZONE  
Van Accessible



Do Not Block with Delivery Truck  
Store # (404) 315-6700  
ADA Comment Line (800) 441-0253



**\$3.83**

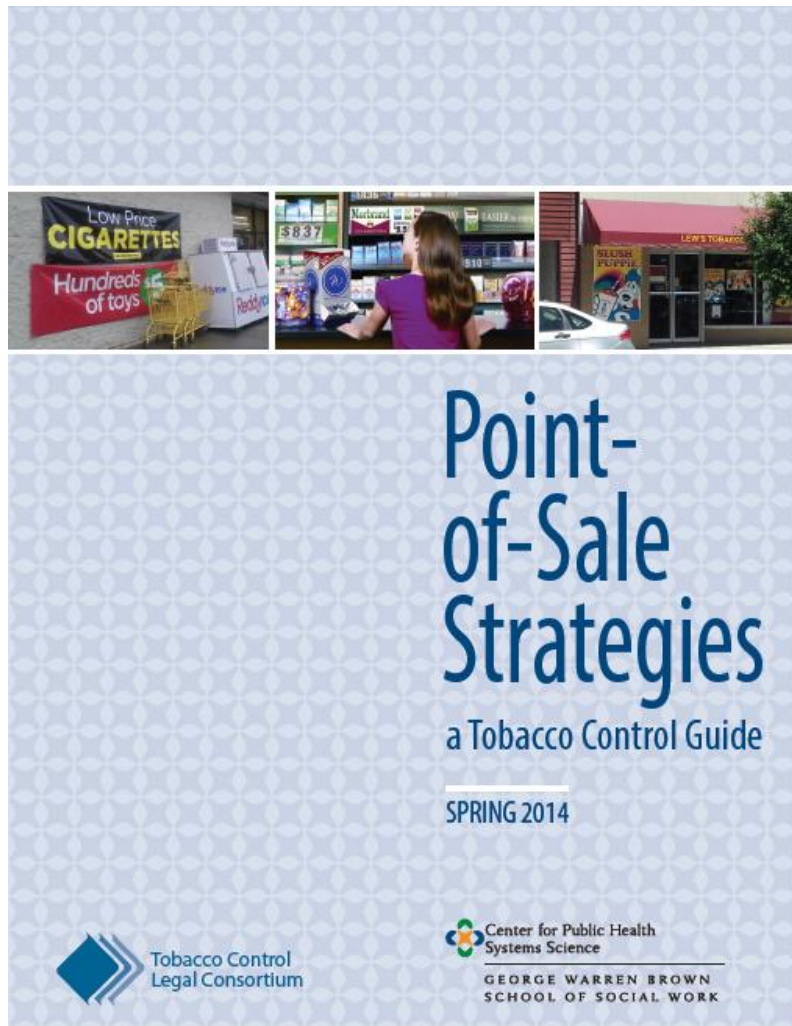
*Per Pack  
When you buy 3!*

Plus sales tax where applicable.

QuikTrip will not sell tobacco to minors. QuikTrip requires all tobacco customers age 40 and under to provide a valid ID.

price promotions

# Identify Policy Change Priorities



Stay tuned for more  
from Maggie!

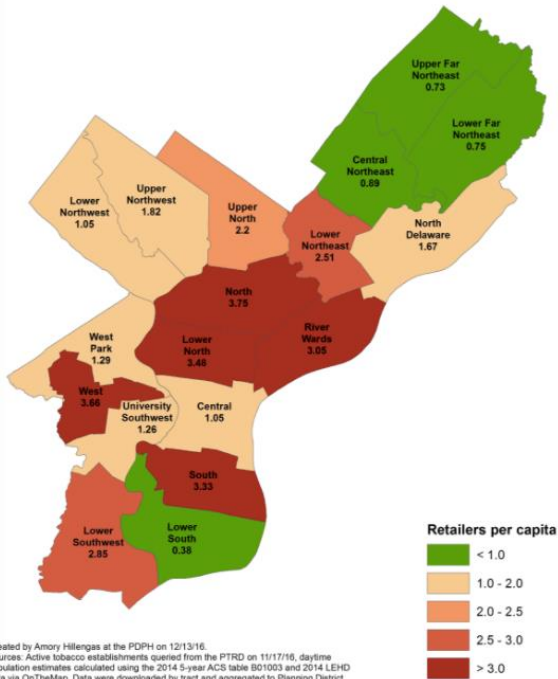




# Educate Policymakers



Tobacco Retailers Per 1,000 Daytime Population  
by Planning District





# Evaluate Change



COUNTER  
TOBACCO



COUNTER  
TOOLS  
ADVANCING PLACE-BASED  
PUBLIC HEALTH



# The Standardized Tobacco Assessment for Retail Settings (STARS)

# Standardized Tobacco Assessment for Retail Settings (STARS)

## Standardized Tobacco Assessment for Retail Settings (STARS)

### FIELD NOTES

- ☐ This retail environment provides a great photo opportunity.

- Date of visit: \_\_\_\_\_ Start Time: \_\_\_\_\_ End Time: \_\_\_\_\_
- Coder Name/ID: \_\_\_\_\_
- Store Name/ID: \_\_\_\_\_  
☐ Store name matches assigned name
- Store Address: \_\_\_\_\_  
☐ Actual address matches assigned address
- Can you survey this store? (If not, then select an option below and STOP)  
☐ Yes, I can  
☐ No, store does not exist  
☐ No, store is closed  
☐ No, under 18 not allowed to enter  
☐ No, membership or fee required to enter  
☐ No, environment unsafe for me  
☐ No, asked to leave before completing the survey  
☐ Other (specify): \_\_\_\_\_

### EXTERIOR

6. Which products are advertised outside the store (on windows/doors, building, sidewalk or elsewhere)?

- |  |                              |                             |
|--|------------------------------|-----------------------------|
| a. Cigarettes - non-menthol              | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Cigarettes - menthol                  | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. Cigarillos/little cigars              | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| d. Large cigars                          | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| e. Chew, moist or dry snuff, dip or snus | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| f. E-cigarettes                          | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

### INTERIOR

7. Store type: (Choose one)

- ☐ Convenience store with or without gas (e.g., 7-Eleven, Exxon, Wawa)  
☐ Drug store/pharmacy (e.g., Walgreens, Rite Aid, Duane Reade)  
☐ Beer, wine, or liquor store (e.g., ABC)  
☐ Grocery store (e.g., small market/deli/produce market) or supermarket (e.g., Stop & Shop, Harris Teeter, Albertson's)  
☐ Mass merchandiser (e.g., Wal-Mart, Costco, BJ's, Sam's Club) or discount store (e.g., Dollar General, Family Dollar)  
☐ Tobacco shop (e.g., Cigarettes Cheaper, cigar shops, hookah bars, e-cigarette shops, or other tobacco shops)  
☐ Other (specify): \_\_\_\_\_ (e.g., donut shop, bait & tackle)

8. Any tobacco products sold here (i.e., cigarettes, cigars, cigarillos/little cigars, chew, moist or dry snuff, dip, snus, or e-cigarettes)? (Choose one)

- ☐ Yes and visible to customers  
☐ Yes but not visible to customers  
☐ No [STOP if focusing on tobacco retailers]

9. Does the store have a pharmacy counter?  
☐ Yes ☐ No

10. Alcoholic beverages sold here?  
☐ Yes ☐ No

11. Does store display a graphic health warning sign?  
☐ Yes ☐ No



Version 5.0 (05-02-14)

1

### CIGARETTES

12. Answer these questions about cigarettes.

- |  |                              |                             |
|--|------------------------------|-----------------------------|
| a. Any cigarettes sold here?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| b. Menthol cigarettes sold here?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| c. Any cigarettes (menthol or non-menthol) within 12 inches of toys, candy, gum, slushy/soda machines, or ice cream? | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| d. Cigarette ad (menthol or non-menthol) within 3 feet of the floor?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| e. Any cigarette price promotions?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |
| f. Any menthol cigarette price promotions?   | <input type="checkbox"/> Yes | <input type="checkbox"/> No |

### OTHER PRODUCTS

- |  | 13. Cigarillos/little cigars                             | 14. Large cigars   | 15. Chew, moist/dry snuff, dip, or snus                  | 16. E-cigarettes   |
|--|--|--|--|--|
| a. Sold here?  | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| b. Flavored products?  | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| c. Singles sold here?  | <input type="checkbox"/> Yes <input type="checkbox"/> No |  |  |  |
| d. Advertised for less than \$1?   | <input type="checkbox"/> Yes <input type="checkbox"/> No |  |  |  |
| e. Product within 12 inches of toys, candy, gum, slushy/soda machines, or ice cream? | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| f. Product ad within 3 feet of floor?  | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| g. Self-service display?   | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |  | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| h. Any price promotions?   | <input type="checkbox"/> Yes <input type="checkbox"/> No |  | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| i. Cross-product promotion with cigarettes?  |  |  | <input type="checkbox"/> Yes <input type="checkbox"/> No | <input type="checkbox"/> Yes <input type="checkbox"/> No |

17. WIC and/or SNAP (i.e., food stamps, EBT) accepted here?

- a. ☐ Yes ☐ No  
 b. ☐ Yes ☐ No

### PRICES

- |                                  | 18. Cheapest cigarette pack   | 19. Newport menthol  | 20. Blu disposable e-cigarette   |
|----------------------------------|---|--|--|
|                                  |   |  |  |
| a. Sold here?                    | <input type="checkbox"/> Yes <input type="checkbox"/> No<br><small>(If cigarettes not sold here, skip to Q.20)</small>  | <input type="checkbox"/> Yes <input type="checkbox"/> No   | <input type="checkbox"/> Yes <input type="checkbox"/> No   |
| b. Enter single pack/item price: | \$ _____  | \$ _____   | \$ _____   |
| c. Sales tax included?           | <input type="checkbox"/> Yes <input type="checkbox"/> No  | <input type="checkbox"/> Yes <input type="checkbox"/> No   | <input type="checkbox"/> Yes <input type="checkbox"/> No   |
| d. How was the price obtained?   | <input type="checkbox"/> Cashier provided price<br><input type="checkbox"/> Advertised price<br><input type="checkbox"/> Unable to determine (e.g. only cartons sold) | <input type="checkbox"/> Cashier provided price<br><input type="checkbox"/> Advertised price<br><input type="checkbox"/> Sold here but price unavailable | <input type="checkbox"/> Cashier provided price<br><input type="checkbox"/> Advertised price<br><input type="checkbox"/> Sold here but price unavailable |

2

# A closer look...

## EXTERIOR

6. Which products are advertised outside the store (on windows/doors, building, sidewalk or elsewhere)?

a. Cigarettes – non-menthol

☐ <sub>1</sub> Yes

☐ <sub>0</sub> No

b. Cigarettes – menthol

☐ <sub>1</sub> Yes

☐ <sub>0</sub> No

c. Cigarillos/little cigars

☐ <sub>1</sub> Yes

☐ <sub>0</sub> No

d. Large cigars

☐ <sub>1</sub> Yes

☐ <sub>0</sub> No

e. Chew, moist or dry snuff, dip or snus

☐ <sub>1</sub> Yes

☐ <sub>0</sub> No

f. E-cigarettes

☐ <sub>1</sub> Yes

☐ <sub>0</sub> No

# A closer look...

9. Does the store have a pharmacy counter?

☐<sub>1</sub> Yes      ☐<sub>0</sub> No



# A closer look...

## CIGARETTES

12. Answer these questions about cigarettes.

- |  |   |  |
|--|---|--|
| a. Any cigarettes sold here?   | <input type="checkbox"/> <sub>1</sub> Yes | <input type="checkbox"/> <sub>0</sub> No |
| b. Menthol cigarettes sold here?   | <input type="checkbox"/> <sub>1</sub> Yes | <input type="checkbox"/> <sub>0</sub> No |
| c. Any cigarettes (menthol or non-menthol) within 12 inches of toys, candy, gum, slushy/soda machines, or ice cream? | <input type="checkbox"/> <sub>1</sub> Yes | <input type="checkbox"/> <sub>0</sub> No |
| d. Cigarette ad (menthol or non-menthol) within 3 feet of the floor?   | <input type="checkbox"/> <sub>1</sub> Yes | <input type="checkbox"/> <sub>0</sub> No |
| e. Any cigarette price promotions?   | <input type="checkbox"/> <sub>1</sub> Yes | <input type="checkbox"/> <sub>0</sub> No |
| f. Any menthol cigarette price promotions?   | <input type="checkbox"/> <sub>1</sub> Yes | <input type="checkbox"/> <sub>0</sub> No |

# A closer look...

17. WIC and/or SNAP (i.e., food stamps, EBT) accepted here?

a.



☐<sub>1</sub> Yes

☐<sub>0</sub> No

b.



☐<sub>1</sub> Yes

☐<sub>0</sub> No

# STARS Resources

Download at CounterTobacco.org:  
[bit.do/STARSresources](http://bit.do/STARSresources)



## Download Materials: ↓

- ☐ **STARS surveillance tool** (1 page, double-sided, 20 questions)
- ☐ **Training PowerPoint** (93 slides for self- or group-administered instruction)
- ☐ **Pocket Guide** (10-page instructional review for use in the field – assembly required)
- ☐ **Pocket Guide Assembly Instructions** (brief instructions on how to assemble pocket guide)
- ☐ **Excel Data Entry Template** (used to enter survey data and compute outcomes)"

## STARS Success Stories:

Assessing Retail Environments with STARS: Standardized Tobacco Assessment for Retail Settings details experiences from the 2014 pilot of STARS in four states: Indiana, Oregon, Texas, and Vermont. This report from the Center for Public Health Systems Science (CPHSS), as part of the Advancing Science and Policy in the Retail Environment (ASPiRE) project funded by the National Cancer Institute (NCI) SCTC Research Initiative, provides examples for other state and local tobacco control coalitions considering integrating STARS into their efforts.

## STARS Policy Crosswalk:

The STARS Policy Crosswalk is a table that pairs items from STARS with relevant POS policies and offers supplemental options from the six POS policy domains.



# Review



## Why POS Matters:

1. Industry spending (\$1M/hour!)
2. Youth initiation
1. Quit attempts more difficult
1. Density & proximity

## Store assessments are great for:

1. Collecting high quality local data
2. Engaging youth & community members
3. Identifying disparities
4. Documenting industry targeting
5. Identifying policy change priorities
6. Educating policymakers
7. Evaluating change



### Resource:

Standardized Tobacco Assessment  
for Retail Settings (STARS)



The retail environment shapes a community's health by providing and promoting—or discouraging—healthy options.



***Thank you!***

**Nina Baltierra, MPH**  
*Director of Programs*  
[nina@countertools.org](mailto:nina@countertools.org)